REMARKS

By means of the foregoing Amendment, Claim 1 has been revised to include the structure originally set forth in Claim 4. Accordingly Claim 4 has been canceled. Thus, as now presented, Claim 1 has been amended to include the structure disclosed in the present application in Fig. 2, and at page 13, lines 20-21, and page 14, lines 7-9, wherein the light-screening layer 6 and the conductor 6' are both found in the second metal layer.

In the above-identified Office Action independent Claim 1 was rejected as being obvious in view of the cited Kuhara patent and Claim 4 was rejected in view of a hypothetical combination of Kuhara and the cited Kozuka patent. Specifically, in rejecting Claim 1, the Examiner relies on several elements of Kuhara as being akin to the elements of Claim 1. In this regard, however, as depicted in Fig. 16 of Kuhara, the conductor 79 and the wiring 62 are connected directly, without the placement of an insulator therebetween. Instead, as shown in Kuhara's Fig. 16, the insulator 75 is provided under the conductor 79, as also described at Col. 14, line 45 thereof. Accordingly, Kuhara does not disclose "a conductor provided on the wiring located inside the pixel region, via an insulator and capable of being kept at a stated potential" as originally set forth in Applicants' Claim 1, nor the requirement of amended Claim 1 "wherein said conductor is formed by the same layer as a light-screening layer defining said pixel region".

By virtue of these special features of the present invention, almost all the radiation noise incident from an external area into the pixel region of a photoreceiving element can be shielded and eliminated. This provides an advantage of reducing

significantly an adverse effect of noise on the wiring connected to a photodiode. See, for example, page 15, line 21 through page 16, line 9 of Applicants' specification.

Furthermore, according to the present invention, since the photocarrier is stored in a floating condition, the photoreceiving area would likely be affected adversely by low frequency noise such as the radiation noise introduced inherently from external areas. In order to eliminate such an adverse effect, on a wiring connected to the photoreceiving area, Applicants' Claim 1 provides a conductor kept at a stated potential and located via an insulator to provide a shield over the pixel region for reducing the effect by the noise. Such an idea of shielding for reducing noise is neither disclosed nor suggested by Kuhara.

In the Office Action it is stated also that Fig. 1A of Kozuka discloses the light-screening layer, which defines the pixel region, and discloses preventing an error signal sent to a peripheral circuit. In this regard, however, as stated above, Kozuka neither discloses nor suggests "a conductor provided on the wiring located inside the pixel region, via an insulator and capable of being kept at a stated potential", nor a limitation "wherein said conductor is formed by the same layer as a light-screening layer defining said pixel region".

Moreover, as distinguished from Applicants' technology, Kozuka is directed to a high imperfection region in a substrate to prevent a carrier causing an erroneous signal from diffusing from a peripheral circuit through the substrate into the photoreceiving region. Thus, Kozuka differs significantly from the present invention which prevents the effects of noise introduced from an external area.

In summary, referring again to Applicants' Specification, and particularly page 14, line 19 through page 15, line 6, Applicants point out that wiring connected to the photoreceiving area would likely be affected by the low frequency noise such as external radiation noise (e.g. from an external power source). Claim 1 requires a conductor located outside of the pixel region, via an insulator, wherein the conductor is maintained at a predetermined potential to provide a shield over the pixel region to reduce the adverse effect of the noise on the photoreceiving area. This invention is not disclosed by a combination of Kuhara and Kozuka.

For these various reasons it is believed that Claim 1, and the pending claims which are dependent thereon, are allowable. Accordingly, the issuance of a Formal Notice of Allowance is solicited.

Applicants' undersigned attorney may be reached in our New York office by telephone at (212) 218-2100. All correspondence should continue to be directed to our below listed address.

Respectfully submitted,

Attorney for Applicants

Registration No. 24613

FITZPATRICK, CELLA, HARPER & SCINTO
30 Rockefeller Plaza
New York, New York 10112-3801
Facsimile: (212) 218-2200

NY_MAIN 371597v1